## **EXCUTIVE SUMMARY**

## AIRCRAFT ACCIDENT INVESTIGATION

## C-17A, T/N 00-0173 JOINT BASE ELMENDORF-RICHARDSON, ALASKA 28 JULY 2010

On 28 July 2010, at approximately 1822 hours local time (L), a C-17A, Tail Number 00-0173, executed a takeoff from Runway 06 to practice maneuvers for the upcoming 31 Jul 10 Arctic Thunder Air Show at Joint Base Elmendorf-Richardson. After the initial climb out and left turn, the pilot executed an aggressive right turn. As the aircraft banked, the stall warning system activated to alert the crew of an impending stall. Instead of implementing stall recovery procedures, the pilot continued the turn as planned, and the aircraft entered a stall from which recovery was not possible. Although the pilot eventually attempted to recover the aircraft, he employed incorrect procedures, and there was not sufficient altitude to regain controlled flight.

The aircraft impacted wooded terrain northwest of the airfield, damaged a portion of the Alaskan Railroad, and was destroyed. The mishap aircraft was assigned to the 3rd Wing based at Joint Base Elmendorf-Richardson, Alaska. The mishap crew was an integrated crew with members from both the 249th and 517th Airlift Squadrons. The mishap crew consisted of a pilot, copilot, safety observer and loadmaster. All four aircrew members died instantly. The mishap aircraft is valued at \$184,570,581 and initial environmental cleanup costs and local damage estimates are currently being determined by AF and local officials. There were no civilian casualties.

The board president found clear and convincing evidence that the cause of the mishap was pilot error. The pilot violated regulatory provisions and multiple flight manual procedures, placing the aircraft outside established flight parameters at an attitude and altitude where recovery was not possible. Furthermore, the copilot and safety observer did not realize the developing dangerous situation and failed to make appropriate inputs. In addition to multiple procedural errors, the board president found sufficient evidence that the crew on the flight deck ignored cautions and warnings and failed to respond to various challenge and reply items. The board also found channelized attention, overconfidence, expectancy, misplaced motivation, procedural guidance, and program oversight substantially contributed to the mishap.

Under 10 U.S.C. 2254(d0, any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report, if any, may not be considered as evidence in any civil or criminal proceeding arising from the accident, nor may such information be considered an admission of liability of the United States or by any person referred to in those conclusions or statements.